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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/826,414

04/05/2001

Hans Josef Rinninger

31530-171041

5027

26694

7590

05/11/2004

VENABLE, BAETJER, HOWARD AND CIVILETTI, LLP

P.O. BOX 34385

WASHINGTON, DC 20043-9998

EXAMINER

ADDIE, RAYMOND W

ART UNIT

PAPER NUMBER

3671

DATE MAILED: 05/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/826,414	RINNINGER, HANS JOSEF	
	Examiner	Art Unit	
	Raymond W. Addie	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 12-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. In view of the Appeal Brief filed on 1/20/2004, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5-8, 12-15, 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClintock # 957,985 in view of Rinninger # 4,792,257.

McClintock discloses a concrete, cube-shaped paving stone (c) with sharp edged corners. Each face of said paving stone being planar such that the distances between the planar sides are equal and that each side of said paving stone can be used as the upper surface of the paving stone.

What McClintock does not disclose is a paving stone having a rounded portion.

However, Rinninger '257 teaches it is desirable to provide paving stones having planar sides, tops and bottoms; with clothodial rounded portions(31) that extend over $\frac{1}{4}$ - $\frac{1}{6}$ th of at least one face; in order to improve water "flow-off" from the top surface of the stone.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the cube shaped paving stone of McClintock, with at least one clothodially rounded edge, in order to improve water drainage of the pavement formed by the paving stones.

In regards to Claims 13, 23 McClintock specifically discloses the desirable advantages to randomly spreading, leveling and grading the paving stones, to provide an aesthetically pleasing appearance and a strong, flat wearing surface provided by the paving stones. Rinninger teaches it is desirable to provide cuboidal paving stones with clothodially rounded edges, to at least a few of the paving stone faces, to permit surface water drainage, which inherently increases the safety of the paved surface, during rainfall. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to form the paved surface of McClintock, such that the paving stones are arranged in a random order, which permits at least a few of the paving stones to form drainage passages, as taught by Rinninger in order to increase the safety of the roadway.

4. Claims 3, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClintock # 957,985 in view of Rinninger # 4,792,257 as applied to claims 1, 14 above, and further in view of Scheiwiller # 5,348,417.

McClintock in view of Rinninger disclose using plurality of differently sized paving stones, in order to form a composite paving surface, having a varied and non-monotonous appearance. What McClintock in view of Rinninger does not disclose is the specific combination of paving stones to include additional blocks that are twice the length and/or twice the width of the standard cuboid stone.

However, Scheiwiller discloses a set of paving stones (1, 7), comprising a 1st molded block (10) having a square cross section, in plan view, and a 2nd molded block (7) having an oblong/rectangular cross section in plan view; with a width and height of edge dimension L equal to that of the 1st molded block and a length of edge dimension 2L. Said set of paving stones (1, 7) can be combine in various patterns to form an appealing surface. See col. 1, ln. 49-col. 2, ln. 31.

5. Claims 3, 4, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClintock # 957,985 in view of Rinninger # 4,792,257 as applied to claims 1, 14 above, and further in view of Scheiwiller # 5,503,498.

McClintock in view of Rinninger disclose using plurality of differently sized paving stones, in order to form a composite paving surface, having a varied and non-monotonous appearance. What McClintock in view of Rinninger does not disclose is the specific combination of paving stones to include additional stones having an oblong/rectangular cross section in plan view; with a width and height of edge dimension L equal to that of the 1st molded block and a length of edge dimension 2L; nor the use of additional blocks that are square in plan view and with dimensions of four cubes with the size of 4 cubes lying beside one another.

However, Scheiwiller discloses a set of paving stones (33, 34, 35), comprising a 1st molded block (1) having a square cross section, in plan view, and a 2nd molded block

(34) having an oblong/rectangular cross section in plan view; with a width and height of edge dimension L equal to that of the 1st molded block and a length of edge dimension 2L and a 3rd paving stone (35) having the size of 4 standard stones (33) Said set of paving stones (1, 7) can be combine in various patterns to form an appealing surface. See Fig. 8; col. 7, Ins. 14-23. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the paving stones of McClintock in view of Rinninger in a set of paving stones having a variety of sizes and shapes, as taught by Scheiwiller '498, in order to provide a paved surface having a varied appearance. See Scheiwiller '498 col. 2, Ins 62-68.

Response to Arguments

6. Applicant's arguments, see pages 9-10 , filed 1/21/2004, with respect to the rejection(s) of claim(s) 3, 4, 16, 17 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Scheiwiller # 5,348,417; Scheiwiller # 5,503,498.

7. Applicant's arguments filed 1/21/2004 have been fully considered but they are not persuasive. Applicant argues against the rejection of claims 1, 2, 4-8, 12-15, 18-23 as being unpatentable over McClintock '985 in view of Rinninger '257; by stating

"the paved surface being provided in the McClintock patent is a utilitarian road surface for both automotive vehicles as well as for vehicles drawn by animals... In contrast the paving stones of the Rinninger '257 patent are for garden walkways... Providing a natural appearance is of no concern in the McClintock patent and a person with ordinary skill in the art, would have seen no need for the cubes to be modified so that they provide a more natural appearance... Furthermore, the pitch, grout cement, mortar or other material filling the spaces between the cubes of McClintock is likely to at least partially cover any rounded corner that might be put on the cubes and thus defeat the purpose of achieving a natural appearance like that achieved in the Rinninger '257 patent".

However, the Examiner does not concur. As clearly stated in the Last Office Action, the teachings of Rinninger '257, "to provide the top of paving stones with clothoidally rounded corners", is an obvious feature to promote surface water drainage, by providing a larger gap between adjacent paving stones for surface water to drain into; and not for increasing the appearance of the formed roadway, as argued.

Further, Rinninger positively recites "However, the disadvantage of plane side faces is that between the individual paving stones there is little free space for water to run off or to seep away into the subsoil or for the possible growing of grass. Known paving stones are therefore sometimes given curved outer Contours".

Hence, Rinninger clearly teaches that it is known to provide paving stones with curved contours to promote water drainage. See Rinninger Col. 1, Ins. 38-42.

Therefore, the argument is not persuasive and the rejection is upheld.

The Applicant then argues "A part of the Rinninger '257 patent is a shaping which allows the existence of interspaces between the paving stones laid against one another...However, since the 2-inch cubes of McClintock are dumped from a cart and merely raked together and then the spaces between them filled with pitch, grout, cement or the like, the shaping object of the Rinninger '257 invention does not apply to the cubes or pavement of McClintock".

However, the Instant Application does not contain any method claims, the manner in which either prior art reference disposes the paving stones onto a surface is irrelevant; since the claims are directed to a paving stone and a set of molded paving stones. Therefore, the argument is not persuasive and the rejection is upheld.

The Applicant then argues "the resulting cubes would have a random orientation and would in most cases be oriented without the face having the rounded corners facing upwardly and thus would defeat the purpose of achieving a natural appearance like that achieved in the Rinninger patent".

However, the Examiner does not concur.

Specifically, nothing in the prior art, require or suggest the rounded corners taught by Rinninger, from being applied to all corners of the paving stone.

Nor do the claims require such an embodiment.

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Rather Rinninger explicitly recites "The recess created as a result of the rounding in the corner region then allows water to flow off easily and, if appropriate, make it possible to grow plants or grass in this region. If the rounding were made as a conventional rounding of constant radius or simply as a constant bevel, the stone shape would not guarantee the desired visual effect, together with the associated possibilities of good water flow-off and growth of plants. In particular, such a paving stone would also always have the same effect, when rotated" and that "The lower face and the upper face of the paving stone can be used equally as the visible face in the laid state". Hence, Rinninger clearly emphasizes the clothoidal curves can be provided to a variety of corners, such that the same water-draining features are possible regardless of which face is used as a top surface. See Rinninger col. 2, Ins. 1-18.

Applicant then argues "claim 1 calls for at least a 1st one of the faces of the molded block being substantially planar over substantially its entire surface area".

However, Claim 1 also calls for "at least a 2nd of said faces having at least one rounded portion extending toward one side edge of said molded block over at least 1/6 of said at least one face".

To that affect McClintock discloses a cubic paving stone having at least one substantially planar surface over its entire surface area. See col. 1, Ins. 26-33.

Further, Rinninger clearly teaches a combination of curved edges (12, 14, 15) and right angled corners (13). Hence, it is obvious that Rinninger contemplates paving stones having both substantially planar faces, having right-angled corners and planar faces having rounded corners. See col. 2, Ins. 1-35; col. 4, Ins. 10-25.

Therefore, the argument is not persuasive.

Applicant argues with respect to claims 5, 14, 18 by stating "the radius of curvature of the rounded portion to decrease constantly toward the side edge"; and that Using the rationale presented above...it would have been even more unobvious to make rounded portions having a radius of curvature which decreases constantly toward the side edge"...and with respect to claims 6 and 19 "that it would have been even less obvious to form...a clothoid extending toward the side edge over approximately $\frac{1}{4}$ to $\frac{1}{6}$ of the cube length".

However, the Examiner does not concur. Rinninger explicitly recites:

"The clothoid-shaped curvature is restricted to approximately $\frac{1}{4}$ to $\frac{1}{6}$ of the total side length. As a result, the main side face remains plane, thus affording the associated advantages during laying and ensuring the associated stability of the laid composite surface". Hence, Rinninger clearly contemplates a variety of benefits occur when paving stones are provided with clothoidal curves extending over at least $\frac{1}{4}^{\text{th}}$ to $\frac{1}{6}^{\text{th}}$ the length of the edge being rounded. See col. 2, Ins. 1-35.

Therefore, the argument is not persuasive and the rejection is upheld.

In regards to Claim 12, Applicant argues "calls for the molded block to have two opposite faces which are substantially planar over their entire surface areas".

However, the Examiner does not concur.

Claim 14 positively recites "a cube and having three sets of opposite faces, each face of said molded block having at least a portion which is planar...at least a first one of the faces of said molded block being substantially planar over substantially its entire surface area".

Hence, Claim 14 only requires "at least one" of the faces to be substantially planar over its entire surface area.

To that affect, McClintock discloses a cubic paving stone having substantially planar sides. See Fig. 4.

Therefore, the argument is not persuasive.

Applicant further argues "Similarly claim 22 depends on claim 14 and calls for the molded block to have two opposite faces which are substantially planar over their entire surface areas".

To that affect McClintock discloses a cubic paving stone having substantially planar sides. See Fig. 4.

Therefore, the argument is not persuasive.

Applicant further argues "To have modified the two-inch blocks of McClintock to include clothoid corners at just enough corners to lead to substantially planar faces opposite one another would have been an improper picking and choosing of certain features from a modifying reference while leaving others behind...Such a modification would not have been obvious".

In response to applicant's argument that improper picking and choosing of certain features from a modifying reference while leaving others behind...would not have been obvious, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In this case, the primary reference to McClintock discloses the use of cube shaped paving stones, having sharp corners and planar surfaces. Rinninger teaches it is desirable to provide paving stones having planar surfaces, with clothoidially rounded corners to promote water drainage, grass growth etc. Hence, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the paving stone of McClintock with clothoidially rounded corners, in order to improve water drainage, as clearly taught by Rinninger. See col. 4.

Therefore, the argument is not persuasive and the rejection is upheld.

Applicant argues against the rejection of Claims 13 and 23 by stating "claim(s) 13, 23) calls for a laid set of blocks comprising...wherein the blocks are laid adjacent to one another in a pattern wherein some of the blocks have as their upper surfaces faces which are substantially planar over their entire surface areas".

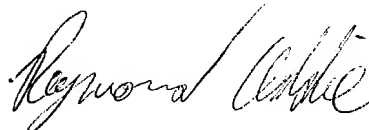
To that affect, Rinninger teaches a paving stone having a combination of curved and sharp corners. Further, McClintock clearly discloses the paving stones can be laid upon a surface, in a random order. Hence, it is obvious that in such an arrangement, at least some of the blocks would have, as their upper faces, faces that are substantially planar over their entire surface area.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 703 305-0135. The examiner can normally be reached on 8-2, 6-8.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 703 308-3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Raymond Addie
Patent Examiner
Group 3600

5/4/2004